

A preliminary study of adaptive random testing techniques

ABSTRACT

Software testing has many types of technique to increase the bug finding. One of the main testing techniques to be considered is including Random Testing (RT). The RT is the method of test in a random manner. The random approach can be a better method if we consider the information about the software under test. Due to this matter, a technique in selection of the test cases which is the reason the Adaptive Random Testing (ART) is proposed. So, we do a preliminary study about the ART to know about ART and to know the elements involves in ART. We found the ART technique are very actively focus area in year 2004 with main three notions: distance; restriction; and partition. This preliminary study helps in our guidance for our future research which is testing a new paradigm (Aspect-Oriented Program).

Keywords: Adaptive random testing; Random testing; Notion; Test cases; Aspect-oriented program